Ham-Digital Digest   Mon, 5 Sep 94   Volume 94 : Issue 295

Today's Topics:
                9600 baud using Kenwood TM201 & TM401
                     AEA DSP2232 Mailing List
                        Detailed FSK Info
                        Digital question
                  High speed protocol machine?!
                        PCB for Baycom???
                          PK-96 For Sale
                   Small 1200 Baud packet modem
                Software to drive a radio data modem?

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 3 Sep 94 16:11:00 GMT
From: agate!howland.reston.ans.net!gatech!wa4mei!totrbbs!steve.diggs@ames.arpa
Subject: 9600 baud using Kenwood TM201 & TM401
To: ham-digital@ucsd.edu

-> You gotta be really careful when you start dinking with the PLL loop
-> filter. There are usually multiple time constants of interest. It is
-> a really good idea to first measure the VCO gain over several band
-> segments (since the gain of most VCOs isn't exactly linear with
-> respect to frequency), determine the phase comparator gain and the
-> loop filter characteristics. Then, calculate the loop frequency and
-> phase response.

Thanks much for the feedback, Dana. I'm hoping that G3RUH will come thru

with a design for how to two-point modulate the TM401. To get this class
of radio working on 9600 would really open up 9600 to a LOT of hams.

-> By the way, MX*COM publishes a very nice databook, which includes
-> charts of BER vs low frequency response of transmitter and receiver.
-> They recommend very highly using "two point modulation", in other
-> words, modulate the VCO and the PLL reference. By modulating the
-> reference, the loop regains good low frequency (even DC) response.

I'm not familiar with MX*COM. Could you provide address/phone info. on
them?

Regards,
Steve Diggs
KB4ZTN

Top Of The Rock BBS - Lilburn, GA   SYSOP: Steve Diggs
UUCP: totrbbs.atl.ga.us   Snailmail: 4181 Wash Lee Ct.
Phone: +1 404 921 8687   Lilburn, GA 30247-7407

Date: 5 Sep 1994 00:01:03 +0200
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!EU.net!Germany.EU.net!
Aachen.Germany.EU.net!rmi.de!Aachen.Germany.EU.net!rmi.de!not-for-
mail@network.ucsd.edu
Subject: AEA DSP2232 Mailing List
To: ham-digital@ucsd.edu

==
      This is the Mailserver at EUnet EUregio POP Aachen
==

If you are interested in exchanging information on the

AEA DSP 2232 - Digital Signal Processing Multi-Mode Data Controller

you are invited to join our Mailing list (started on May 12, 1994).
Please subscribe by sending a Mail to

dsp2232-request@rmi.de   [or dsp2232-request@Aachen.Germany.EU.net]
with the subject: "subscribe" .

If you would like to share your experiences of knowledge on the
unit, write you contributions to

dsp2232@rmi.de   [or dsp2232@Aachen.Germany.EU.net].

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======================================================================
          Automatic weekly mailing
======================================================================


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Date: 3 Sep 1994 16:32:36 GMT
From: agate!howland.reston.ans.net!vixen.cso.uiuc.edu!prairienet.org!
k9cw@ames.arpa
Subject: Detailed FSK Info
To: ham-digital@ucsd.edu


In a previous article, khansen@ix.netcom.com (Kevin Hansen) says:


>I'm looking for detailed information reguarding HF digital signals.
>I'm in the process of designing a modem and am frustrated at the
>conflicting signal specifications uncovered during my search.  At this
>point, I am looking for signal parameters as opposed to protocols (but
>thay will be of interest soon).
>The ARRL Handbook contains some of the details, but they are scattered
>and incomplete.  Can anyone suggest a reference?
>


What, specifically, are you asking?  Ham HF digital modes use only a couple
differest FSK shifts:  2125/2295 (170Hz RTTY and AMTOR) and 2100/2300 (200Hz
packet and Pactor).  Most RTTY DX uses 45 baud although there are many 75
baud users out there.  AMTOR is 100 baud.  Pactor is 100 or 200 baud.
Packet is 300 baud.


73, Drew
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*-----------------------------*-------------------------------------*
|    Andrew B. White  K9CW    |    internet: k9cw@prairienet.org    |
|    ABW Associates, Ltd.     |   phone/fax: 217-643-7327           |
*-----------------------------*-------------------------------------*


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Date: Sun, 4 Sep 94 14:38:03 GMT
From: ihnp4.ucsd.edu!agate!darkstar.UCSC.EDU!news.hal.COM!olivea!
charnel.ecst.csuchico.edu!yeshua.marcam.com!zip.eecs.umich.edu!panix!198!
mgalatz@network.ucsd.edu
Subject: Digital question
To: ham-digital@ucsd.edu


Is it possible to create a software application that would eliminate the
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need for a radio modem: In other words, just taking the sound from a radio
and putting it into the sound input on a Mac.

Why couldn't such an idea work?

mgalatz@panix.com

Date: 5 Sep 94 08:24:52 GMT
From: news-mail-gateway@ucsd.edu
Subject: High speed protocol machine?!
To: ham-digital@ucsd.edu

Im looking for a TNC that could handle fast data a lot better
than a TNC2. Im running 2 pair of TNC2 at ttl levels in 19200 bit/s, and I they
cant fill the "air" with data. About 10% of the channel capacity
usage. And the parameters are at optimum. No TX delays and
so on. I have heard about a TNC3 with a 68302 CPU, and
about a 8530 with DMA for ISA bus. What about them ?
Any one there running them? And where do I order ?
Havn't seen them i QST, think it may be a Germany system.
By the way I thing the 8530 card is called PI2.

/Peter, SM0OHI

Date: 3 Sep 1994 23:06:35 GMT
From: nntp.crl.com!jeffj@decwrl.dec.com
Subject: PCB for Baycom???
To: ham-digital@ucsd.edu

I am looking for a PCB for a Baycom modem. I have the chips for it just
need the PCB (makes my life easier 8-)). Thanks for any and all info!

Jeff
AB6MB
jeffj@crl.com

Date: Sun, 4 Sep 1994 13:05:33 GMT
From: netcomsv!netcom.com!fmitch@decwrl.dec.com
Subject: PK-96 For Sale

To: ham-digital@ucsd.edu

Cliff Nail   US - 227 (kb5rtk@rt66.com) wrote:
: In article <347d8t$46l@glock.ramp.com> markm@glock.ramp.com (Mark Monninger)
writes:
: GOOD DEAL!

good deal???? check the fine print at the back of the pk-96 manual...
the 9600 baud modem is of the k9ng persuasion... *not* g3ruh!!!

mitch

--
  * * * I collect telegraph equipment (mostly bugs - Vibroplex) * * *

Email: fmitchell@rd.qms.com   or, second choice, fmitch@netcom.com
Felton "Mitch" Mitchell, WA4OSR, 11 Midtwon Park, E., Mobile, AL 36606 USA
205-342-7259 home, 205-476-4100 work, 205-476-0465 FAX
co-sysop for W4IAX bbs running fbb ... sysop for WA4OSR DXCluster in Mobile..

Date: Sun, 4 Sep 1994 20:19:14 GMT
From: ihnp4.ucsd.edu!usc!math.ohio-state.edu!uwm.edu!news.alpha.net!mvb.saic.com!
eskimo!rdonnell@network.ucsd.edu
Subject: Small 1200 Baud packet modem
To: ham-digital@ucsd.edu

Jay Sissom (JAY@medicine.dmed.iupui.edu) wrote:
: I would like to build a small device that will send packets when a button is
: pushed or some other event like that.

: To do this, I would need a small 1200 baud modem. Since this device will only
: send unconnected packets, I don't need the entire AX.25 protocol in this
: device. I can hardcode the packet in an EPROM then send it when the button is
: pushed.

: Does anyone know where I can find a schematic or information on a 1200 baud
: modem for this purpose?

I don't have specifics here, but any of the modems specified for Baycom or
Poor Mans Packet would do the job. The only thing simpler would be to use
the transmit half of the 2206/2211 modem chip set used on the older-design
TNC's. The 2206 is a digitally keyed AFSK generator. The 'down-side' of
such a modulator is you have to choose stable components in the oscillator,
and you have to have a counter or a calibrated signal generator to set the
tones - and they could drift at extremes of temperature. That won't happen

if you use on the of the crystal-controlled modem chips.

: Thanks
: Jay
: KA9OKT

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| Bob Donnell, kd7nm   bob@ethanac.kd7nm.ampr.org   rdonnell@eskimo.com |
| Western Washington Amateur IP Address Coordinator   (206) 775-3651 |

Date: 3 Sep 1994 18:40:16 +0200
From: agate!howland.reston.ans.net!EU.net!Austria.EU.net!newsfeed.ACO.net!
fuw.edu.pl!cyfronet!galaxy.uci.agh.edu.pl!galaxy.uci.agh.edu.pl!news@ames.arpa
Subject: Software to drive a radio data modem?
To: ham-digital@ucsd.edu

Harrie Overdijk (overdijk@ecn.nl) wrote:
: Hello friends,

: I've got a Satelline-1AS Radio Data Modem here on my desk.
: This is not a Hayes compatible thing. It does half-duplex
: communications. By switching DTR on on the RS232-port, the
: Radio Modem is powered on. (signalled via DSR). When CD is
: switched on, there is something to receive. To send something
: switch on RTS and wait for CTS. This can take a while because
: it's possible that the radio channel isn't free yet.

Pawel Jalocha <jalocha@chopin.ifj.edu.pl> wrote asynchronic
packet driver for similar radios. You can ask him for it.
Our test showed that works great.

Grzegorz

End of Ham-Digital Digest V94 #295
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